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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,714	10/07/2005	Michael H. May	PAT 838W-2	4459

26123 7590 10/05/2009  
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CANADA

EXAMINER
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ROGERS, JAMES WILLIAM

ART UNIT	PAPER NUMBER
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1618

NOTIFICATION DATE	DELIVERY MODE
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10/05/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipinfo@blgcanada.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/552,714	<b>Applicant(s)</b> MAY ET AL.	
	<b>Examiner</b> JAMES W. ROGERS	<b>Art Unit</b> 1618	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-10,12-15 and 17-30 is/are pending in the application.
- 4a) Of the above claim(s) 27-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,4-5,12-15,17-21 and 23-26 is/are rejected.
- 7) ☒ Claim(s) 6-10 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Any objection/rejection from the previous office action filed 02/20/2009 not addressed in the action below has been withdrawn.

#### ***Election/Restrictions***

Newly submitted claims 27-30 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the antimicrobial polymer or apparatus containing the antimicrobial polymer can be used in a number of different processes other than inhibiting bacterial growth on a patient in need. For instance the antimicrobial polymer and apparatus made from it can be used in food packaging, agricultural processing, clothing etc.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 27-30 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

#### ***Allowable Subject Matter***

Claims 6-10 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4-5,13-14 and 21,23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Otterbach et al. (CA 2,384,427), for the reasons set forth in the previous office actions filed 02/20/2009. A new rejection of claims 23-26 was necessitated by applicants amendments to the claims. Claims 23-26 are nearly identical to previous claims 20-21, therefore the apparatus claimed is considered met by the examiner for the reasons set forth in the previous office action.

### ***Response to Arguments***

Applicant's arguments filed 05/20/2009 have been fully considered but they are not persuasive. Applicants assert that Osterback does not teach discrete hydrophobic and hydrophilic segments with cationic functionality. As evidence applicants point to the examples which they purport show that the hydrophobic and hydrophilic monomers used to make the polymer would be dispersed randomly and would not be present in discrete segments. Applicants lastly assert that the reference does not teach selective antimicrobial activity.

The examiner respectfully disagrees with the arguments above. First as noted in the previous office action the polymers which are graft polymerized on a substrate, the substrate included several synthetic polymers such as polystyrene, polyurethanes etc. considered by the examiner as meeting the claimed hydrophobic segment. Since the side chain contain cationic monomers the examiner considers these side chains as meeting applicants claimed hydrophilic segment. Regarding the argument that Osterback does not teach a selective antimicrobial polymer, the antimicrobial polymer of

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Osterback is within applicants claimed scope, therefore the examiner considers any property of their claimed polymer met because the same polymer will inherently have the same properties.

Claims 1,5,12-15,18-21 and 23-26 rejected under 35 U.S.C. 102(b) as being anticipated by Deets et al. (US 4,684,708), this new rejection was necessitated by applicants amendments to the claims.

Deets teaches cationic starch graft copolymers useful in the paper industry in which the main chain cationic starch contains side chains of hydrophobic polymer chains and cationic vinyl polymer chains such as dimethylaminoethyl methacrylate. See col 1 lin 56-col 2 lin 62, col 3 lin 19-28 and claims. The cationic starch is considered by the examiner as meeting a difunctional oligomer or polymer. Regarding the recitation that the polymer has antimicrobial activity within the claims, since the polymer of Deets is essentially the same as applicants claimed copolymer it is inherent that the polymer will have the same properties.

Claims 1,4-5,12-15,17-21 and 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Chatterjee et al. (US 3,889,678), this new rejection was necessitated by applicants amendments to the claims.

Chatterjee teaches cellulose graft copolymers containing side chains in which some of the side chains are polymers made from ionic monomers such as polymethacrylic acid and other side chains are made from non-ionic monomers, preferably polymethyl methacrylate. See abstract, col 1 lin 67-col 2 lin 54, col 4 lin 18-45 and claims. The cellulose graft copolymers were useful fibers in a number of

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endeavors including wound dressings, napkins, tampons etc. See abstract, col 4 lin 54-62 and claims. Regarding the recitation that the polymer has antimicrobial activity within the claims, since the polymer of Chatterjee is essentially the same as applicants claimed copolymer it is inherent that the polymer will have the same properties.

### ***Conclusion***

No claims are allowed at this time.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP §706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Rogers, Ph.D. whose telephone number is (571) 272-7838. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on (571) 271-0616. The fax phone number for

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the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael G. Hartley/

Supervisory Patent Examiner, Art Unit 1618